

CLAIMS

1 1. A skylight assembly, comprising:
2 at least one skylight shaft;
3 at least one layer of reflective film on the inside of the shaft;
4 at least one layer of adhesive holding the film to the shaft; and
5 at least one surface irregularity formed in at least one of: the adhesive,
6 the reflective film, and the shaft.

2 2. The skylight assembly of Claim 1, further comprising:
3 a skylight dome covering a top end of the shaft.

4 3. The skylight assembly of Claim 1, further comprising:
5 a diffuser plate covering a bottom end of the shaft.

6 4. The skylight assembly of Claim 1, wherein the film includes plural
1 layers.

2 5. The skylight assembly of Claim 1, wherein the film is greater than fifty
3 percent (50%) specularly reflective.

1 6. The skylight assembly of Claim 5, wherein plural surface irregularities
2 are formed without defining a pattern.

1 7. The skylight assembly of Claim 1, wherein the surface irregularity is
2 formed in the adhesive as the adhesive is deposited on the inside of the shaft.

1 8. The skylight assembly of Claim 1, further comprising:
2 plural surface irregularities.

1 9. The skylight assembly of Claim 1, wherein the surface irregularities
2 establish a pattern.

1 10. The skylight assembly of Claim 1, wherein each surface irregularity
2 includes:

3 an upper face establishing a first angle with respect to a long axis of the
4 shaft;

5 and

6 a lower face establishing a second angle with respect to the long axis
7 of the shaft, the first angle being more acute than the second angle.

1 11. A skylight assembly, comprising:
2 at least one skylight shaft;

3 at least one layer of reflective film on the inside of the shaft;
4 at least one layer of adhesive holding the film to the shaft; and
5 means for diffusing light as it is reflected through the length of the shaft.

1 12. The skylight assembly of Claim 11, further comprising:
2 means for allowing only light to enter the skylight shaft.

1 13. The skylight assembly of Claim 11, further comprising:
2 means for further diffusing light reflected through the length of the shaft
3 as it exits the shaft.

1 14. A method for making a skylight shaft, comprising the acts of:
2 providing a flat substrate;
3 forming surface irregularities in the substrate;
4 rendering the flat substrate reflective; and
5 forming a shaft out of the substrate.

1 15. The method of Claim 14, wherein the surface irregularities are formed
2 by moving the substrate between two rollers closely spaced from each other, at least
3 one roller having means for forming the surface irregularities in the substrate.

1 16. The method of Claim 14, wherein the surface irregularities are formed
2 by rolling at least one roller across the substrate, the roller having means for forming
3 the surface irregularities in the substrate.

1 17. The method of Claim 14, wherein the surface irregularities are formed
2 by pressing the substrate with a press having means for forming the surface
3 irregularities in the substrate.

1 18. The method of Claim 14, wherein the rendering act is undertaken by
2 adhering a reflective film onto the substrate.

1 19. A method for making a skylight shaft, comprising the acts of:
2 providing a flat substrate;
3 forming surface irregularities in the substrate;
4 applying adhesive to the substrate;
5 applying a reflective film to the adhesive; and
6 forming a shaft out of the substrate.

1 20. The method of Claim 19, wherein the surface irregularities are formed
2 by moving the substrate between two rollers closely spaced from each other, at least
3 one roller having means for forming the surface irregularities in the substrate.

1 21. The method of Claim 19, wherein the surface irregularities are formed
2 by rolling at least one roller across the substrate, the roller having means for forming
3 the surface irregularities in the substrate.

1 22. The method of Claim 19, wherein the surface irregularities are formed
2 by pressing the substrate with a press having means form forming the surface
3 irregularities in the substrate.

1 23. A method for making a skylight shaft, comprising the acts of:
2 providing a flat substrate;
3 applying adhesive to the substrate;
4 forming surface irregularities in the adhesive;
5 applying a reflective film to the adhesive; and
6 forming a shaft out of the substrate.

1 24. The method of Claim 23, wherein the surface irregularities are formed
2 by moving the substrate between two rollers closely spaced from each other, at least
3 one roller having means for forming the surface irregularities in the adhesive.

1 25. The method of Claim 23, wherein the surface irregularities are formed
2 by rolling at least one roller across the substrate, the roller having means for forming
3 the surface irregularities in the adhesive.

1 26. The method of Claim 23, wherein the surface irregularities are formed
2 by pressing the substrate with a press having means form forming the surface
3 irregularities in the adhesive.

1 27. A skylight assembly, comprising:
2 at least one skylight shaft;
3 means for reflecting light through the shaft; and
4 means for diffusing light as it is reflected through the shaft.

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10 28. The skylight assembly of Claim 27, further comprising:
11 means for allowing only light to enter the skylight shaft.

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17 29. The skylight assembly of Claim 27, further comprising:
18 means for further diffusing light reflected through the length of the shaft
19 as it exits the shaft.

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25 30. A skylight assembly, comprising:
26 a shaft; and
27 a reflective surface on the inside of the shaft, the surface defining at
28 least one diffusion anomaly on an otherwise smooth inner shaft surface.

1 31. The skylight assembly of Claim 30, wherein the surface is established
2 by a film adhered to the shaft.

1 32. The skylight assembly of Claim 30 wherein the surface is established
2 by the shaft itself.

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